

## **Dr. Joan Oltman-Shay**

Dr. Oltman-Shay is a Senior Research Scientist and Vice President of Northwest Research Associates (NwRA), which is a group of 63 earth scientists and support staff performing basic and applied research. In the fall of 2002, she will assume the position of President, NwRA. Dr. Oltman-Shay is also an Affiliate of the School of Oceanography (University of Washington) and the College of Oceanic and Atmospheric Sciences (Oregon State University). She received her B.S. degree in applied physics/electrical engineering from the University of California at San Diego and M.S. and Ph.D. degrees in applied ocean sciences and oceanography from Scripps Institution of Oceanography (SIO). She studied under William Hodgekiss (Marine Physical Laboratory, SIO) and Dr. Robert T. Guza (Center for Coastal Studies, SIO).

Since graduating from Scripps in 1986, she has spent most of her career performing field and model studies of nearshore (shoreline to nominally 10m depth) wave and current dynamics and the interplay with morphology and sediment dynamics. Much of her work has centered on the analysis of data from in-situ arrays of pressure and current sensors designed to study the surface gravity (wind and infragravity) wave field and the wave-averaged current field. Significant results from those efforts are - the recognition that infragravity waves are ubiquitous with kinematics that agree with theory, and the discovery of shear instability waves of longshore-directed currents. Early in her career she designed the U.S. Army Corps of Engineers 8m-depth wave-directional array and analysis software for the Field Research Facility in Duck, NC. Recently, her activities have included remote sensing of nearshore environmental parameters (satellite, airborne, and land-based). She has published over fifty refereed articles, technical reports, and conference papers on these and related topics.

As an active member of the oceanography community, Dr. Oltman-Shay has been a member of The Oceanography Society (TOS) since its inception, the American Meteorological Society, and the American Geophysical Union. She has served as Associate Editor for JGR Oceans, and is presently the U.S. Editor for the Nearshore and Coastal Oceanography journal (Elsevier Science Publications) and serves on its Editorial Advisory Board. Dr. Oltman-Shay recently chaired a committee of the Ocean Studies Board of the National Research Council that reviewed the Coastal and Marine Geology Program of the U.S. Geological Survey and has served, and is serving, as a member of several other national-level groups that developed recommendations on various aspects of coastal science and research. Significant National Academy Press publications from those efforts are - "Science for Decisionmaking: Coastal and Marine Geology at the U.S. Geological Survey," (1999), "Oceanography and Naval Special Warfare: Opportunities and Challenges," (1997), "Priorities for Coastal Ecosystem Science," (1994).